

CLAIM AMENDMENTS

Please amend the following claim(s) to read as follows:

1. (Original) A method of making a fiber pitch binder comprising the steps of:
 - (a) providing a pitch having a viscosity of about 0.1 to about 5 poise;
 - (b) providing carbon fibers in an amount of about 0.5 to about 10.0 wt% of said pitch; and
 - (c) admixing said fibers and said pitch to disperse said fibers into a fiber pitch binder.
2. (Original) The method of claim 1 wherein step (a) comprises providing a pitch having a viscosity of about 0.1 to about 5 poise at a temperature of about 260° to about 140°C.
3. (Original) The method of claim 1 wherein in step (c) said fibers are substantially dispersed into substantially single mono-filaments which are randomly oriented within the fiber pitch binder.
4. (Original) The method of claim 1 wherein step (b) comprises providing carbon fibers in an amount of about 5 wt.% of said pitch.
5. (Original) The method of claim 1 wherein step (b) comprises providing an amount of carbon fibers having a length of about 6 to about 30 mm.
6. (Original) The method of claim 5 wherein step (b) comprises providing an amount of carbon fibers containing sizing.
7. (Original) The method of claim 1 wherein in step (b) said fibers are added to said pitch without a substantial amount of a filler.

8. (Original) The method of claim 1 wherein step (a) comprises providing an amount of pitch derived from coal tar.

9. (Original) The method of claim 1 wherein step (a) comprises providing an amount of pitch derived from petroleum feedstock.

10. (Original) The method of claim 1 wherein step (c) comprises admixing said fibers and said pitch by heating said fibers and said pitch to a temperature wherein said pitch has a viscosity of less than about 5 poise, followed by stirring at about 100 to about 1000 rpm for a sufficient time such that said fibers are substantially dispersed into substantially single mono-filaments which are randomly oriented within the fiber pitch binder.

11. (Original) The method of claim 1 wherein upon substantial completion of step (c), the fiber pitch binder has a softening point of about 90°C to about 200°C, a MCC value of about 50 to about 75%, and a viscosity of about 1 to about 50 poise at about 160°C.

12. (Original) A method of making a fiber pitch binder comprising the steps of:

- (a) providing a pitch having a viscosity of about 0.1 to about 5 poise;
- (b) providing an amount of carbon fibers; and
- (c) admixing said fibers and said pitch to homogeneously disperse said fibers into a fiber pitch binder such that said fibers are dispersed into substantially single mono-filaments which are randomly oriented within the fiber binder pitch.

13. (Original) The method of claim 11 wherein step (b) comprises providing carbon fibers in an amount of about 5 wt.% of said pitch.

14. (Original) The method of claim 11 wherein in step (b) said fibers are added to said pitch without a substantial amount of a filler.

15. (Original) A pitch based binder comprising an admixture of pitch having a viscosity of about 0.1 to about 5 poise at a temperature of about 260 to about 140°C with 0.5 to about 10.0 wt.% of carbon fibers based on a weight of said pitch, substantially homogeneously dispersed within said pitch as substantially single mono-filaments which are randomly oriented.

16. (Original) The pitch based binder of claim 15 wherein said admixture has a softening point of about 90 to about 200°C, a MCC value of about 50 to about 75% and a viscosity of about 1 to about 50 poise at about 160°C.

17. (Original) The pitch based binder of claim 15 wherein said admixture has substantially similar theological behavior as said pitch.

18. (Original) A method of forming a carbon body comprising the steps of:

- (a) providing a binder comprising an admixture of pitch having a viscosity of about 0.1 to about 5 poise at a temperature of about 260 to about 140°C and about 0.5 to about 10.0 wt.% of carbon fibers based on a weight of said pitch, substantially homogeneously dispersed within said pitch as substantially single mono-filaments which are randomly oriented;
- (b) providing a filler;
- (c) mixing said binder having said carbon fibers substantially homogeneously dispersed as substantially single mono-filaments which are randomly oriented with said filler to produce a binder-filler mix;
- (d) shaping said binder-filler mix to form a shaped body; and
- (e) carbonizing said shaped body to form a carbon body.

19. (Original) The method of claim 18 wherein step (a) comprises providing a binder having a softening point of about 90 to about 200°C, a MCC value of about 50 to about 75%, and viscosity of about 1 to about 50 poise at about 160°C.

20. (Original) The method of claim 18 wherein in step (a) said pitch is derived from coal tar.

21. (Original) The method of claim 18 wherein in step (a) said pitch is derived from petroleum feedstock.

22. (Currently amended) A carbon body having a substantially homogenous distribution of carbon fibers dispersed within said carbon body as substantially single mono-filaments which are randomly oriented, said carbon fibers present in an amount of about 1.5 to about 3.0 wt.% based on a weight of said carbon body, said carbon body being carbonized after said fibers are dispersed therein.

23. (Original) A method of making a graphite body having a reduced coefficient of thermal expansion comprising the steps of:

(a) providing a binder comprising an admixture of pitch having a viscosity of about 0.1 to about 5 poise at a temperature of about 260 to about 140°C and about 0.5 to about 10.0 wt.% of carbon fibers based on a weight of said pitch, substantially homogeneously dispersed within said pitch as substantially single mono-filaments which are randomly oriented;

(b) providing a filler;

(c) mixing said binder and said filler to produce a binder-filler mix having a substantially homogenous dispersion of carbon fibers which are randomly oriented throughout;

(d) extruding said binder-filler mix to form a carbon body;

(e) carbonizing said carbon body; and

(f) graphitizing said carbon body to form a graphite body.

24. (Original) The method of claim 23 wherein step (f) comprises graphitizing said carbon body to form a graphite body having carbon fibers substantially homogeneously dispersed throughout said graphite body as substantially single mono-filaments of a random orientation.

25. (Original) The method of claim 23 wherein step (f) comprises graphitizing said carbon body to form a graphite body having about 1.5 to about 3.0 wt.% carbon fibers

based on a weight of said graphite body, substantially homogeneously dispersed throughout said graphite body as substantially single mono-filaments of a random orientation.

26. (Original) A graphite body having a substantially homogenous distribution of carbon fibers dispersed within said graphite body as substantially single mono-filaments of a random orientation, said carbon fibers present in an amount of about 1.5 wt.% to about 3.0 wt.% based on a weight of said graphite body.

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27. (Previously amended) A graphite body having a longitudinal coefficient of thermal expansion of about $-0.5 \times 10^{-6}/^{\circ}\text{C}$ to about $0.10 \times 10^{-6}/^{\circ}\text{C}$ as measured from about 25 to about 200 $^{\circ}\text{C}$ and substantially homogenous distribution of carbon fibers dispersed within said graphite body as substantially single mono-filaments of a random orientation, said carbon fibers present in an amount of about 1.5 wt% to about 3.0 wt% based on a weight of said graphite body.

28. (Original) A graphite body having a substantially homogenous distribution of carbon fibers dispersed within said graphite body as substantially single mono-filaments of a random orientation, said carbon fibers present in an amount of about 1.5 wt.% based on a weight of said graphite body.

29. (Original) A graphite body produced by a method of:

- (a) providing a binder comprising an admixture of pitch having about 0.5 to about 10.0 wt.% of carbon fibers based on a weight of said pitch, substantially homogeneously dispersed within said pitch as substantially single mono-filaments of a random orientation;
- (b) providing a filler;
- (c) mixing said binder and said filler to produce a binder-filler mix having a substantially homogenous dispersion of carbon fibers which are randomly oriented throughout;
- (d) extruding said binder-filler mix to form a carbon body;
- (e) carbonizing said carbon body;

(f) graphitizing said carbon body to produce said graphite body having about 1.5 to about 3.0 wt.% carbon fibers based on a weight of said graphite body, said fibers dispersed throughout said graphite body as substantially single mono-filaments of a random orientation.

30. (Original) A graphite body produced by a method of:

- (a) mixing a binder comprising an admixture of pitch having a viscosity of about 0.1 to about 5 poise at a temperature of about 260 to about 140°C and about 0.5 to about 10.0 wt.% of carbon fibers based on a weight of said pitch, said fibers substantially homogeneously dispersed within said pitch as substantially single mono-filaments of a random orientation, with a coke filler to form a binder-filler mix;
- (b) extruding said binder-filler mix to form a carbon body;
- (c) carbonizing said carbon body;
- (d) graphitizing said carbon body to produce said graphite body having about 1.5 to about 3.0 wt.% carbon fibers based on a weight of said graphite body, said fibers dispersed throughout said graphite body as substantially single mono-filaments of a random orientation.

31. (Original) The carbon body according to claim 22 having a longitudinal coefficient of thermal expansion of about $-0.5 \times 10^{-6}/^{\circ}\text{C}$ to less than $0.14 \times 10^{-6}/^{\circ}\text{C}$ as measured from about 25 to about 200°C.

32. (Original) The carbon body according to claim 22 wherein a diameter of said carbon fibers comprises about 5 μm to about 30 μm .

33. (Original) The carbon body according to claim 22 The graphite body according to claim 28 The graphite body according to claim 26 wherein a diameter of said carbon fibers comprises about 5 μm to about 30 μm .

34. (Previously added) The graphite body according to claim 26 wherein a length of said carbon fiber comprises about 5 mm to about 40 mm.

35. (Previously added) The graphite body according to claim 27 wherein a diameter of said carbon fibers comprises about 5 μm to about 30 μm .

36. (Previously added) The graphite body according to claim 27 wherein a length of said carbon fiber comprises about 5 mm to about 40 mm.

37. (Previously added) The graphite body according to claim 28 wherein a diameter of said carbon fibers comprises about 5 μm to about 30 μm .

38. (Previously added) The graphite body according to claim 26 having a longitudinal coefficient of thermal expansion of about $-0.5 \times 10^{-6}/^\circ\text{C}$ to less than $0.14 \times 10^{-6}/^\circ\text{C}$ as measured from about 25 to about 200 $^\circ\text{C}$.

39. (Previously added) The graphite body according to claim 26 wherein a tensile strength of said carbon fiber comprises greater than about 100,000 psi.

40. (Previously added) The graphite body according to claim 27 a tensile strength of said carbon fiber comprises greater than about 100,000 psi.

41. (Previously added) The graphite body according to claim 28 a tensile strength of said carbon fiber comprises greater than about 100,000 psi.